

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 7/7/2023 Revision date: 2/27/2024 Supersedes: 9/19/2023 Version: 4.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture Product name Ebonite H-150T Product code 586451

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Cross Ebonite Oils are asphaltic oils for use in the tire and rubber Industry; grease, open gear,

chain and ink applications

1.3. Supplier

Cross Oil Refining & Marketing, Inc. 484 E. 6th Street Smackover, AR, 71762 US T 870-864-7500 www.crossoil.com

1.4. Emergency telephone number

: CHEMTREC (800) 424-9300 Emergency number

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Specific target organ toxicity - Repeated exposure, Category 2 May cause damage to organs through prolonged or repeated H373

exposure.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS US) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P314 - Get medical advice/attention if you feel unwell.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Hydrotreated Heavy Naphthenic Base Oil	CAS-No.: 64742-52-5	84 – 98
Bitumens	CAS-No.: 8052-42-4	2 – 4

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you

feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor

if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not

breathe dust/fume/gas/mist/vapours/spray.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle

until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe

dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing

before reuse. Do not eat, drink or smoke when using this product. Always wash hands after

handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ebonite H-150T

No additional information available

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)

No additional information available

Bitumens (8052-42-4)

USA - ACGIH - Occupational Exposure Limits

Local name	Asphalt (Bitumen) fumes, as benzene-soluble aerosol
ACGIH OEL TWA	0.5 mg/m³ (Inhalable fraction)
Remark (ACGIH)	TLV® Basis: URT & eye irr. Notations: A4 (Not classifiable as a Human Carcinogen); BEIP
Regulatory reference	ACGIH 2022

2/27/2024 (Revision date) US - en 3/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):







SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Black liquid.
Colour : Black

Odour: Mild hydrocarbonOdour threshold: No data availablepH: No data availableMelting point: Not applicableFreezing point: No data available

Boiling point : $316 \, ^{\circ}\text{C}$ Flash point : $250 \, ^{\circ}\text{C}$

Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Density : 7.77 lb/gal

Solubility : Material insoluble in water.

Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available

Viscosity, kinematic : 648 mm²/s @ 100F; 27 cST @ 210 F.

Viscosity, dynamic : No data available Explosive limits : No data available Explosive properties : No data available Oxidising properties : No data available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

Skin corrosion/irritation

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified.

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)			
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)		
LD50 dermal rabbit	2000 mg/kg Source: IUCLID		
LC50 Inhalation - Rat (Dust/Mist)	5.53 mg/l Source: ECHA		
ATE US (dermal)	2000 mg/kg bodyweight		
ATE US (dust,mist)	5.53 mg/l/4h		
Bitumens (8052-42-4)			
LD50 oral rat	> 5000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))		
LD50 dermal rabbit	> 2000 mg/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))		
LC50 Inhalation - Rat	> 0.094 mg/l (OECD 403: Acute Inhalation Toxicity, 4.5 h, Rat, Male / female, Experimental value, No effect, Inhalation (mixture of vapour and aerosol), 14 day(s))		
ATE US (dust,mist)	0.05 mg/l/4h		

2/27/2024 (Revision date) US - en 5/10

: Not classified

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.

Ditumono	(ODEO 40 4)
Bitumens ((XU5Z-4Z-4)

IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)

LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	≈ 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Bitumens (8052-42-4)

LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.0207 mg/l air Animal: rat, Guideline: other:OECD 451			
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.			
	and the second s			

Aspiration hazard : Not classified

Viscosity, kinematic : 648 mm²/s @ 100F; 27 cST @ 210 F.

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)

Viscosity, kinematic	1.99 – 847 mm²/s Temp.: '40°C' Parameter: 'mm²/smm2/s '
VISCOSILY, KILICITIALIC	1.33 - 047 Hill /3 Temp 40 O Talameter. Hill /3Hill /3

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)			
LC50 - Fish [1] > 5000 mg/l Source: IUCLID			
EC50 - Crustacea [1] > 1000 mg/l Source: IUCLID			
EC50 96h - Algae [1] > 1000 mg/l Source: IUCLID			

12.2. Persistence and degradability

Bitumens (8052-42-4)

Persistence and degradability

Not readily biodegradable in water.

12.3. Bioaccumulative potential

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)

Partition coefficient n-octanol/water (Log Pow) 3.9 – 6 Source: IUCLID

Bitumens (8052-42-4)

Bioaccumulative potential No bioaccumulation data available.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.4. Mobility in soil

Bitumens (8052-42-4)

Ecology - soil No (test)data on mobility of the substance available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA		
14.1. UN number					
3257	UN3257	3257	3257		
14.2. Proper Shipping Name	14.2. Proper Shipping Name				
Elevated temperature liquid, n.o.s.	ELEVATED TEMPERATURE LIQUID, N.O.S.	ELEVATED TEMPERATURE LIQUID, N.O.S.	Elevated temperature liquid, n.o.s.		
Transport document description					
UN3257 Elevated temperature liquid, n.o.s., 9, III	UN3257 ELEVATED TEMPERATURE LIQUID, N.O.S., 9, III	UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S., 9, III	UN 3257 Elevated temperature liquid, n.o.s., 9		
14.3. Transport hazard class(es	5)				
9	9	9	9		
	***************************************	****	Not applicable		
14.4. Packing group					
III	III	III	Not applicable		
14.5. Environmental hazards					
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No		
No supplementary information available					

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN3257

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)

: IB1 - Authorized IBCs: Metal (31A, 31B and 31N). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T3 - 2.65 178.274(d)(2) Normal...... 178.275(d)(2)

TP3 - The maximum degree of filling (in %) for solids transported above their melting points and for elevated temperature liquids shall be determined by the following: Degree of filling = 95 * (dr / df) Where: df and dr are the mean densities of the liquid at the mean temperature of the liquid during filling and the maximum mean bulk temperature during transport respectively. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used

provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178,275 of this subchapter, where the test pressure is 1.5 times the

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

MAWP

DOT Packaging Exceptions (49 CFR 173.xxx) : None DOT Packaging Non Bulk (49 CFR 173.xxx) : None DOT Packaging Bulk (49 CFR 173.xxx) 247 DOT Quantity Limitations Passenger aircraft/rail (49 : Forbidden

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

DOT Vessel Stowage Location

CFR 175.75)

passenger vessel.

DOT Vessel Stowage Other : 85 - Under deck stowage must be in mechanically ventilated space

· Forbidden

TDG

UN-No. (TDG) : UN3257

TDG Special Provisions : 16 - (1) The technical name of at least one of the most dangerous substances that predominantly

contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks).

(2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:

(a) UN1544, ALKALOID SALTS, SOLID, N.O.S, or ALKALOIDS, SOLID, N.O.S;

(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;

(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;

(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or

(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.

(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:

(a) UN2814. INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS.

Explosive Limit and Limited Quantity Index

Excepted quantities (TDG)

0 E0 Forbidden

Passenger Carrying Road Vehicle or Passenger

Carrying Railway Vehicle Index

Emergency Response Guide (ERG) Number

128

IMDG

Special provisions (IMDG) : 232. 274 Limited quantities (IMDG) : 0 : E0 Excepted quantities (IMDG) : P099 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC01 Tank instructions (IMDG) : T3 Tank special provisions (IMDG) : TP3, TP29

2/27/2024 (Revision date) US - en 8/10

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-P - SPILLAGE SCHEDULE Papa - SUBSTANCES DANGEROUS WHEN WET

(COLLECTABLE ARTICLES)

Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW5
Flash point (IMDG) : above 100°C

Properties and observations (IMDG) : Any liquid which is transported at or above 100°C but below its flashpoint. May cause fire if in

contact with combustible material due to extreme temperature.

IATA

: E0 PCA Excepted quantities (IATA) Forbidden PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) Forbidden PCA packing instructions (IATA) Forbidden PCA max net quantity (IATA) Forbidden : Forbidden CAO packing instructions (IATA) : Forbidden CAO max net quantity (IATA) ERG code (IATA) : 9L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Hydrotreated Heavy Naphthenic Base Oil	64742-52-5	Present	Active	
Bitumens	8052-42-4	Present	Active	

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)

Listed on the Canadian DSL (Domestic Substances List)

Bitumens (8052-42-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Hydrotreated Heavy Naphthenic Base Oil (64742-52-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Bitumens (8052-42-4)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 2/27/2024

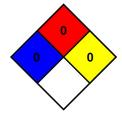
Full text of H-state	ements
H373	May cause damage to organs through prolonged or repeated exposure.

NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including

 intrinsically noncombustible materials such as concrete, stone, and sand.

: 0 - Material that in themselves are normally stable, even under fire conditions.



Safety Data Sheet (SDS), USA

NFPA reactivity

Information provided in this Safety Data Sheet is considered accurate and reliable based on information issued from internal and outside sources to the best of Cross Oil Refining & Marketing, Inc.'s knowledge; however, Cross Oil Refining & Marketing, Inc. makes no representations, guarantees or warranties, expressed or implied, of merchantability or fitness for the particular purpose, regarding the accuracy of such information or the result to be obtained from the use thereof or as to the sufficiency of information herein presented. Cross Oil Refining & Marketing, Inc. assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Cross Oil Refining & Marketing, Inc. must rely upon information provided by the material manufacturers or distributors.